

## PROTECTION OF PLANTS USED TO INCREASE FOREST DIVERSITY

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### ABSTRACT

Forest managers in the Pacific Northwest recognize that plant diversity is important for wildlife habitat, riparian restoration, and timber production. Desired species include trees such as western redcedar (Thuja plicata) and bigleaf maple (Acer macrophyllum), and many shrubs, vines, and forb species. Many of these plants are more palatable than Douglas fir (Pseudotsuga menziesii), and if not protected are damaged extensively by wildlife before they become established. We have, and are continuing to evaluate materials and methods to protect these plants using repellents, barriers, and improvement in plant species composition, to alleviate damage from wildlife. One commercial repellent (BGR-P) and an experimental repellent derived from starlings (Sturnus vulgaris) significantly reduce damage to western redcedar. Increased densities of selected forbs have reduced damage to Douglas fir and may benefit other species. Several native plant species are being evaluated to reduce damage to other plants. Barrier materials are selected to accommodate specific growth patterns of the plant species needing protection.